

Applicant: Radinger et al.
Application No.: 10/565,864

CLAIMS

1. (Currently amended) Planet carrier [(2)] for a gearbox, comprising:
 - a flange part [(11)] comprising a radially extending first ring-shaped disk [(13)], which is provided with a receptacle [(15)] formed by an axial offset, and an axially extending cup-shaped projection [(14)] extending from an inner edge of the receptacle [(15)],
 - a step-like cup body [(12)] comprising a first sleeve section [(17)] and a second sleeve section [(18)] of smaller and larger diameter, respectively, wherein the sleeve sections are connected to each other at one of each of their ends by a radially extending second ring-shaped disk [(19)], so that they are offset axially relative to each other, and an angled ring-shaped projection [(21)] located at an outer end of the first sleeve section [(17)],
 - wherein an outer diameter of the first sleeve section [(17)] is adapted to an inner diameter of the receptacle [(15)] of the flange part [(11)], wherein the cup body [(12)] engages at a projection-side end in the radial receptacle [(15)] of the flange part [(11)] and is partially overlapped by the receptacle in an axial direction, whereby the ring-shaped projection [(21)] contacts the receptacle [(15)] of the flange part [(11)] in the axial direction,
 - and with a ring-shaped weld connection [(32)] between the ring-shaped projection [(21)] and the receptacle [(15)], as well as
 - recesses [(27)] for planet gears [(4)] located in the first sleeve section [(17)], wherein the planet gears are guided inwards through the recesses in the sleeve section [(17)] and engage in a sun gear [(5)].

2. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 1, wherein an inner diameter [(D1)] of the ring-shaped projection [(21)] of the cup

body [(12)] is larger than an inner diameter [(D2)] of the receptacle [(15)] of the flange part [(11)], whereby a thrust bearing receptacle [(22)] is created, in which a thrust bearing [(23)] is arranged.

3. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 1, wherein the second sleeve section [(18)] is provided with teeth [(20)] for brake or clutch plates.

4. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 1, wherein the cup body [(12)] is produced through non-cutting shaping of a sheet metal part.

5. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 1, wherein the flange part [(11)] is produced through non-cutting shaping of a sheet metal part.

6. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 1, wherein aligned bore holes [(25)] are arranged in the first ring-shaped disk [(13)] of the flange part [(11)] and in the second ring-shaped disk [(19)] of the cup body [(12)] for holding pins [(26)], on which the planet gears [(4)] are mounted.

7. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 1, wherein the weld connection [(32)] between the ring-shaped projection [(21)] of the step-like cup body [(12)] and the ring-shaped receptacle of the flange part is a resistance weld.

8. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 1, wherein an inner surface of the cup-shaped projection [(14)] is provided with inner serrated teeth [(28)].

9. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 1, wherein an inner ring (~~29, 31~~) of a free-wheel or a rolling bearing is installed on the cup-shaped projection [(14)] of the flange part [(11)].

10. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 9, wherein the inner ring (~~29, 31~~) is attached with a non-positive fit on the cup-shaped projection [(14)] of the flange part [(11)].

11. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 9, wherein the inner ring (~~29, 31~~) is attached with a positive fit on the cup-shaped projection [(14)] of the flange part [(11)].

12. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 10, wherein the cup-shaped projection [(14)] of the flange part [(11)] is provided with external serrated teeth [(30)], on which the inner ring (~~29, 31~~) is installed.

13. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 9, wherein the inner ring [(29)] of the rolling bearing is formed with a solid form.

14. (Currently amended) Planet carrier [(2)] for a gearbox according to Claim 9, wherein the inner ring [(31)] of the rolling bearing comprises a cup body with two rims produced with a non-cutting method.